

# SpaceLogic Sensors

## Pressure - Dry Differential Switch

### SPD910 Series



#### Product Description

This series of four SPD910 differential air flow switches are intended for use in air handling systems for the monitoring of air ducts, filters and fans.

The enclosure is plastic with a rating of IP54. A set-point adjustment is provided under the clip-on clear plastic cover.

Supplied complete with mounting adaptor ring, two straight duct probes and 2 metre (6.56 feet) length clear tubing.

#### Features

- Easy to install
- User friendly snap cover
- Case geometry allows easy cable lead-in
- Cable strain relief integrated in PG11 (DIN 40430)
- High adjustment accuracy through individual laser etched scale
- Long-term stability of switching points through trapezoidal bead diaphragm
- Multi-layer gold plated contact

#### Available Products

Part No.	Model No.	Description	Pressure Range
004701060	SPD910-300Pa	Air Differential Pressure Switch	20 ... 300 Pa (0.08 ... 1.2 in. W.C)
004701070	SPD910-500Pa	Air Differential Pressure Switch	50 ... 500 Pa (0.2 ... 2.0 in. W.C)
004701080	SPD910-1000Pa	Air Differential Pressure Switch	100 ... 1000 Pa (0.4 ... 4.0 in. W.C)
004701090	SPD910-2000Pa	Air Differential Pressure Switch	500 ... 2000 Pa (2.0 ... 8.0 in. W.C)

#### Specifications

Medium	Air and neutral gases
Pressure range	See Available Products table
Set-point scale	Pa

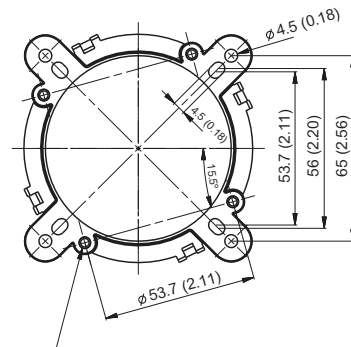
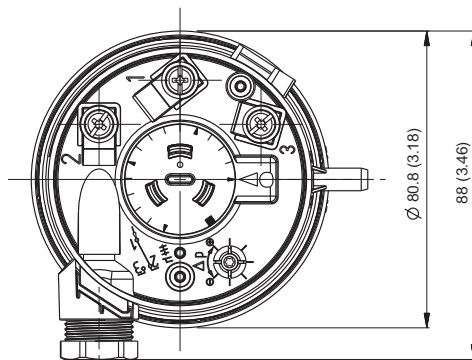
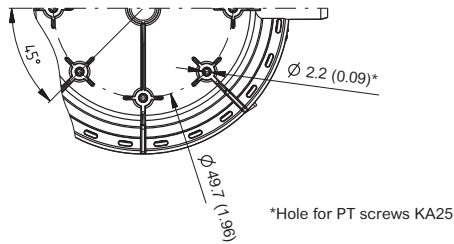
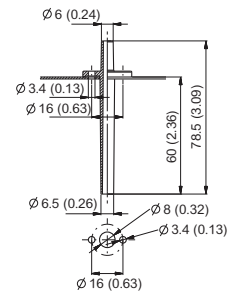
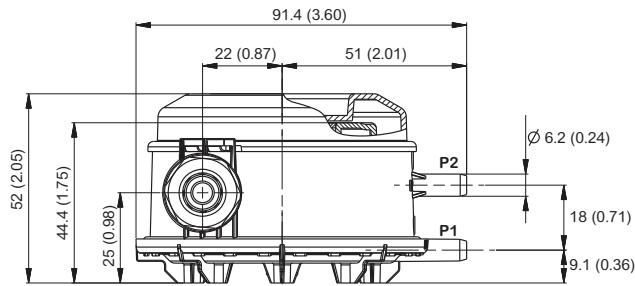
#### Specifications (cont.)

Tolerable overload on one side	5000 Pa at -30 ... +85 °C 20 in. W.C at -22 ... +185 °F	
Repeatability	SPD910-300Pa	±2.5 Pa (0.01 in. W.C)
	SPD910-500Pa	±5 Pa (0.02 in. W.C)
	SPD910-1000Pa	±5 Pa (0.02 in. W.C)
	SPD910-2000Pa	±5 Pa (0.02 in. W.C)
Switching load	Resistive load	5 A at 250 Vac 4 A at 30 Vdc
	Inductive	0.8 A at 250 Vac 0.7 A at 30 Vdc
Materials in contact with the medium		Case: PC 10% GF Cover: PC Diaphragm: Silicone LSR tempered 200 °C, free of gas emissions
Operating temperature	Medium/ambient	-30 ... +85 °C (-22 ... +185 °F)
	Storage	-40 ... +85 °C (-40 ... +185 °F)
Service life	Mechanical > 10 <sup>6</sup> switching cycles	
Electrical connection		Screw terminals Cable gland type PG11 (DIN 40430) complete with cable strain relief
Switch contact type		SPDT (change-over)
Protection standard	Without cover	IP 00
	With cover	IP 54
Pressure connections		Pipe Ø 6.2 mm
Tests/admissions	Electromagnetic compatibility	CE conformity according to EN 60730-2-6: 2008
	EU conformity	Low voltage directive 2014/35/EU
	Gas appliance directive	2009/142/EC
	Pressure sensing devices for gas burners & gas burning appliances	EN 1854:2010
EU directive on RoHS		2011/65/EU

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## Dimensions mm (in.)



4 x hole PT - screw  $d_1 = 3.0$  mm (0.12 in.)

## Functions

The pressure switch has two separate pressure chambers, each with its own connection. The change-over switch operates according to the user-defined set-point and type of monitoring application required. Normally closed, the switch contact is made across terminals 1 and 2; when normally open the switch contact is made across terminals 1 and 3.

## Vacuum Monitoring

Connect the pressure switch via P2. Do not connect P1. Leave P1 open. Make sure that debris cannot get into P1.

## High Pressure Monitoring

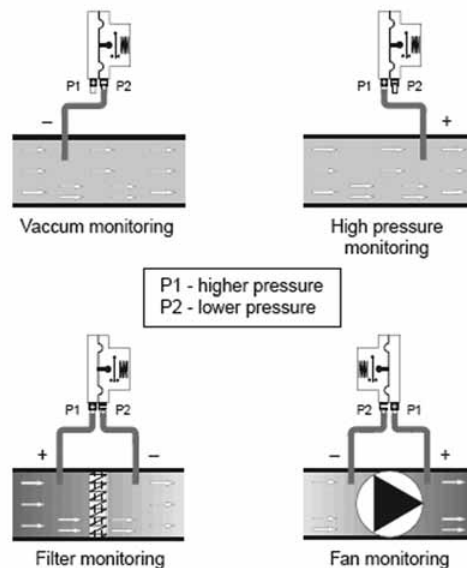
Connect the pressure switch via P1. Do not connect P2. Leave P2 open. Make sure that debris cannot get into P2.

## Filter Monitoring

Connect P1 before the filter and P2 after it.

## Fan Monitoring

Connect P1 after the fan (in air flow direction) and P2 before the fan.



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